

We claim:

1. A method for identifying an agent which modulates an FSH or FSH  
5 Mimetic influenced cellular process or response, the method comprising:  
a) exposing a sample of cells to FSH or FSH Mimetic;  
b) determining the level of expression in the sample of cells of one  
or more FSH OR FSH Mimetic stimulated genes (Tables 1, 2, 3)  
in the presence and absence of a selected agent; and  
10 c) identifying that the agent modulates an FSH or FSH Mimetic  
influenced cellular process or response when the expression of  
the one or more FSH or FSH Mimetic stimulated genes in the  
cell sample in the presence of the agent differs from the  
expression of the one or more FSH or FSH Mimetic stimulated  
genes in the absence of the agent.

2. A method for identifying an agent which modulates an FSH or FSH  
Mimetic influenced cellular process or response, the method comprising:  
a) exposing a sample of cells to FSH or FSH Mimetic;  
20 b) determining the activity in the sample of cells of the product of  
one or more FSH or FSH Mimetic stimulated genes (Table 1, 2,  
or 3) in the presence and absence of a selected agent; and  
c) identifying that the agent modulates an FSH or FSH Mimetic  
influenced cellular process or response when the activity of the  
product of the one or more FSH or FSH Mimetic stimulated  
25 genes in the cell sample in the presence of the agent differs from

the activity of the product of the one or more FSH or FSH  
Mimetic stimulated genes in the absence of the agent.

3. A method for identifying an agent which modulates an FSH or FSH

5 Mimetic influenced cellular process or response, the method comprising:

- See a2*
- a) providing a sample of cells;
  - b) determining the level of expression in the sample of cells of one or more FSH or FSH Mimetic stimulated genes (Tables 1, 2, 3) in the presence and absence of a selected agent; and
  - c) identifying that the agent modulates an FSH or FSH Mimetic influenced cellular process or response when the expression of the one or more FSH or FSH Mimetic stimulated genes in the cell sample in the presence of the agent differs from the expression of the one or more FSH or FSH Mimetic stimulated genes in the absence of the agent.

4. A method for identifying an agent which modulates an FSH or FSH  
Mimetic influenced cellular process or response, the method comprising:

- a) providing a sample of cells;
- b) determining the activity in the sample of cells of the product of one or more FSH or FSH Mimetic stimulated genes (Table 1, 2, or 3) in the presence and absence of a selected agent; and
- c) identifying that the agent modulates an FSH or FSH Mimetic influenced cellular process or response when the activity of the product of the one or more FSH or FSH

Mimetic stimulated genes in the cell sample in the presence of the agent differs from the activity of the product of the one or more FSH or FSH Mimetic stimulated genes in the absence of the agent.

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5. A method for detecting or monitoring a cellular process or response that is influenced by FSH or FSH Mimetic, the method comprising:

- See a3*
- a) obtaining a sample of cells from a patient;
  - b) determining the level of expression in the sample of cells of one or more FSH or FSH Mimetic stimulated genes (Tables 1, 2, 3); and
  - c) identifying that the cells in the sample of cells obtained from the patient are undergoing a cellular process or response that is influenced by FSH or FSH Mimetic when the level of expression of the one or more FSH or FSH Mimetic stimulated genes in the cell sample is increased relative to the level of expression of the one or more FSH or FSH Mimetic stimulated genes in a control the sample.

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6. A method for detecting or monitoring a cellular process or response that is influenced by FSH or FSH Mimetic, the method comprising:

- a) obtaining a sample of cells from a patient;
- b) determining the level of activity in the sample of cells of the product of one or more FSH or FSH Mimetic stimulated genes (Tables 1, 2, 3);

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c) identifying that the cells in the sample of cells obtained from the patient are undergoing a cellular process or response that is influenced by FSH or FSH Mimetic when the level of activity of the product of the one or more FSH or FSH Mimetic stimulated genes in the cell sample is increased relative to the activity of the product of the one or more FSH or FSH Mimetic stimulated genes in a control the sample.

10 7. A method for assessing whether cells will be responsive to an agent which modulates an FSH or FSH Mimetic influenced cellular process or response comprising the steps of

- 15 *See AH*
- a) exposing a sample of cells obtained from a patient to a test agent;
  - b) determining the level of expression in the sample of cells of the one or more FSH or FSH Mimetic stimulated genes (Tables 1, 2, and 3) in the sample exposed to the agent and in a sample of cells that is not exposed to the agent; and
  - c) determining that the cells will be responsive to the agent
- 20 when 20 expression of the one or more of the FSH or FSH Mimetic stimulated genes is altered in the presence of the agent.

8. A method for assessing whether cells will be responsive to an agent

25 which modulates an FSH or FSH Mimetic influenced cellular process or response comprising the steps of

